Vivekananda Global University, Jaipur

OUTLINE OF PROPOSED RESEARCH INVESTIGATION FOR Ph.D. DEGREE

1. **Name of Scholar:**
   Atahar Parvez Bashir Ahmed Daulatabadi

2. **Registration number:**
   VGU/2015/RES/SCH/CE/0202

3. **Title of the Research Investigation (Max. 25 words):**
   Critical Review of FIDIC Contract and Model Concession Agreement for Highway Development Projects in India to Reduce Risk of Project Failure due to Disputes.

4. **Faculty/Department/Subject:**
   Civil Engineering (Civil Works Contract Administration)

5. **Objective and Scope of the Research Investigation (Approx. 500 words):**

   5.1 Brief Background: For implementation of any civil engineering project, there is an agreement between the owner of the facility and the contractor who builds / construct or provides it. This agreement provides the terms and conditions of the contract, obligations on part of each party to the contract, procedures for disputes etc. For all major highway development projects in India, mostly either of the two Contracts forms, namely FIDIC Conditions of Contract or Model Concession Agreement (MCA) is used.

   It has been observed that almost all major highway development projects in India have disputes. Though, the numbers of disputes or implication of disputes in a project varies from insignificant to quite significant, but disputes remain almost invariable. These disputes, sometimes, are so critical that they lead to project failures in the form of either of the following.

- Foreclosure without completion
- Extraordinary cost overruns – loss of public money
- Extraordinary time overruns – public facility delayed or deprived

There are various reasons of the disputes between the two parties in a contract (Road Authorities and Contractor/concessionaire). These disputes largely occur due to inappropriate and/or inadequate contract provisions, non-clarity leading to different interpretation, improper selection of Contract Document for a type of work, Gaps or loopholes leading to loss to either party etc. It has been also observed that the Internal Rate of Return (IRR) for a PPP project is either misinformed or incorrectly calculated and the advantage or the risk is not shared reasonably. This also leads to disputes.

A general observation of pattern and types of disputes point out that;

- there is a lot of similarity in various disputes especially with regard to its origin
- Same dispute re-occur in different projects, and
- Different officers on different project interpret same clause differently because of non-clarity.

5.2 Research Objectives: The objective of the research is to study and critically review the most commonly used contract format in India namely, FIDIC Conditions of Contract and the Model Concession Agreement (MCA), in light of the disputes commonly arising during use of these documents and to

- Identify and suggest amendments in contract provisions that lead to frequent disputes and project failures – Reducing Project Failure Risks on account of faulty contract provisions.
- Suggest suitable type of Contract documents for different types of contract – Framing guidelines for use of appropriate format of the contract.
- Drafting
    a. A model 'Conditions of Particular Application' document for FIDIC Contracts modifying clauses leading to disputes.

b. Preparation of a checklist to amend the Schedules and Articles of MCA as per the type of Contract.

It has been also observed that the Internal Rate of Return (IRR) for a PPP project is either misinformed or incorrectly calculated and the advantage or risk is not shared reasonably. This also leads to disputes.

5.3 Scope and Limitations**:** The scope of critical review of the contract document is mainly limited to FIDIC and MCA Contract. Despite the fact that there are some other forms of Contract also in use in India.

The Critical Review of Documents is only intended to address the issue of reducing the risks of project failures due to disputes and may not include other project management aspects. Though the researcher intends to review the amendments and modifications done by various international agencies, the geographical scope of review and recommendations will be is mainly limited to India. Despite the fact that most of the research findings and results may be valid anywhere, some issues may be applied only to the specific conditions in India. Also, the method of interpreting qualitative data will most likely be extremely subjective and difficult particularly when trying to develop the themes, categorise the information, link the thoughts and opinions to close the loop and gain a comprehensive understanding.

6. Proposed Methodology (Approx. 200 words):

The proposed research is of qualitative nature because it aims to induce the relation between the choice of a standard contract, provision of appropriate condition of contracts and contractual disputes. The research method depends on reviewing the literature and surveying the opinions of Indian construction practitioners via interviews, as well as the experience the researcher has in the construction industry in India. Qualitative researchers collect facts and study the relationship between them. They use predetermined research questions and conceptual/ theoretical framework to produce generalised conclusions. By this methodological approach, which combines the strength of academic literature and

industry perspective, **recommendations for the contract forms which most likely could minimise disputes and more suitable to be used within India will be presented.**

The variables or units of analysis in the theoretical framework of this research are FIDIC and MCA standard contracts and construction disputes. The main assumption here of the interaction between the variables is that the suitable amendment in certain contract clauses, choice of the contract has a direct effect on the disputes between construction parties. In other words, the contract clauses and form of contracts are the independent variables whereas the dispute is the dependent variable. The proposition here is that amendment of certain contract clauses which lead to frequent disputes in FIDIC and MCA may minimise disputes. The validity of this proposition will be investigated by surveying the opinions of practitioners through interviews and through critical review of already occurred disputes. Obviously, the findings of this research will have a strong impact on understanding the relationship between standard contracts clauses and disputes.

7. Importance of Proposed Research Investigation/ Expected outcome (Approx. 200 words):

The suggested research can help in identifying the reasons (the contract provisions or faulty contract formats) which lead to disputes during course of the contracts and subsequently result into project failures. This study may be quite useful for the civil engineering professionals who are engaged in drafting contracts especially on behalf of various Governments.

Expected Outcome

- Suggesting appropriate amendments in contract provisions and clauses that lead to frequent disputes and project failures.
- Preparing guidelines for use of appropriate form of the contract from the many documents available during bidding stage.
- Drafting

a. A model 'Conditions of Particular Application' document for FIDIC Contracts modifying clauses leading to disputes.
b. Preparation of a checklist to amend the Schedules and Articles of MCA as per the type of Contract.

8. Review of the work related to the field of Research- already done on the subject -Present and Past Status (Approx.200 words):

There are many research and investigation reports and articles produced and published internationally on FIDIC Conditions of Contract. Most of these researches are focused on either of the following

- Comparing the FIDIC Conditions of Contract with their respective national bidding formats,
- Suggesting modifications in condition of contracts for a particular country
- Commentary and explanatory guide to use FIDIC conditions of Contract
- Cases studies and analysis of disputes in different projects
- Suggesting modifications to balance project risk between Employer and Contractor

There is a vast research work done on FIDIC Conditions of Contract as it is an international document.

For Model Concession Agreement (MCA), which is specific to India, drafted by Ministry of Road Transport and Highways, Government of India, there are technical reports and articles published in Indian Highways and other magazines, focusing on some particular aspect of it. There is no much research done on it as it being comparatively newer.

9. Research Gaps identified in the proposed field of investigation - Based on review (Approx. 100 words):

Analysis of project failures due to disputes regarding contractual provisions on Indian Highway Development Projects and guidelines / recommending for modification / amendments of contractual clauses that frequently leads to disputes.

10. Chapter wise details of Proposed Research Investigation Ph.D. Thesis:

A. Preliminary Section:

This section shall include Title Page, Acknowledgments, Table of Contents, List of Tables, List of Figures and Executive Summary of the research report.

B. Main Report:

1. **Introduction:**
   Statement of problem, significance of the problem, purpose of the research, Statement of Hypothesis, Assumptions, Limitations, Definition of Terms used.

2. **Review of Related Literature**: This chapter shall cover the details of the review of the Literature and analysis of previous research.

3. **Design of the Study:** This chapter will cover the description of research design and procedures followed, Sources of data, methods and instruments of data collection, statistical treatment.

4. **Analysis of Data**: Analysis of data collected with appropriate text, tables and figures.

5. **Summary and Conclusions**: Restatement of the research problem, description of the procedures, major findings (locating the contractual issues leading to disputes), Recommendations to address the major findings, Conclusion and scope for further research.

C. Reference Section: End Notes, References, Bibliography, Appendix

11. Expected duration of the investigation (Year wise schedule to be give):

Activity	Period	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17
Literature Review	6 months																		
Design Research Study	3 months																		
Data Collection	6 months																		
Data Analysis	4 months																		
Summary and recommendations	4 months																		
Conclusion and Report preparation	2 months																		

12. Facilities available for the investigation at scholar end and facilities required on campus:

Research Scholar is professionally engaged with a consulting firm providing consulting services on highway development projects and is personally associated with many projects as contract specialist. The facilities available at scholar's end are:

- the data base on disputes in various projects,
- library providing all major contract formats along with commentaries on them,
- different cases for case studies on disputes arising out of contract provisions,
- Contacts and links of various government and private officials working on contract administration for interviews

The key facility requirement from the campus is the highly desired guidance from the supervisor (Guide). At times, the research scholar may need the facility of University's library and reference.

13. Bibliography:

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2. FIDIC, "Conditions of Contract for Design, Build and Operate Projects", 2008 (Gold Book)
3. FIDIC, "Conditions of Contract for Construction" 1999 (Red Book)
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12. Ranfdeen Rameedeen, “Contract Interpretation: the impact of readability”, ‘Construction Management and Economics’, Vol-25, Issue 7, 2007.
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22. Abhaya Krishna Agarwa, “New Model of Indian Road PPP Projects”, Emst and Young LLP, India, January 2015
23. “Report of the Committee on Revisiting and Revitalising Public Private Partnership Model”, Department of Economic Affairs, Ministry of Finance, Govt. of India, November 2015.

24. Koko Udom, “A brief Introduction to FIDIC Contracts”, NBS, Feb 2014
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28. Peter Hetherington, “Construction Contract Claims”, Palgrave Macmillon, Nov -2011
29. D. Bryan Morgan, “Dispute Avoidance: A non-confrontational approach to the management of construction contracts”, RIBA Publishing, Aug-2008
30. Dávis Fenn and O’Shea, “Dispute Resolution and Conflict Management in Construction”, E&FN Spon, 1998
31. David Richbell, “Mediation of Construction Disputes”, Blackwell Publishing, 2008
32. Nicholas Carnell, “Causation and Delay in Construction Disputes”, Blackwell Publishing, 2005
33. Douglas A Stephenson, “Arbitration Practice In Construction Contracts”, Blackwell Science, 2001
34. D. Bryan Morgan, “Dispute Avoidance: A non-confrontational approach to the management of construction contracts”, RIBA Publishing , 2008
35. P. John Keane, “Delay Analysis in Construction Contracts”, Wiley Blackwell, 2015
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